TECHNISCHER KUNDENDIENST

Service-Information

CP 3001 – 988.183 H
CP 7000 – 988.187 H
CP 3500 – 988.185 H

TECHNICAL DATA – CARACTERISTIQUES PRINCIPALES
TECHNISCHE DATEN – CARACTERISTICAS DEL APARATO – DATI TECNICI

Type of set : **Type d'appareil :** **Geräteart :** **Tipo de aparato :** **Tipo d'apparecchio :**	Compact disc player Lecteur de disques audio - numériques Compact disc - spieler Tocadiscos laser Lettore dischi audionumerico	355 mm 440 mm	75 mm 290 mm 3,5 kg
Power supply and consumption : **Alimentation et consommation :** **Stromversorgung und Leistungsaufnahme :** **Alimentacion y consumo :** **Alimentazione e consumo :**	220V-50Hz	**Frequency response :** **Courbe de réponse :** **Frequenzgang :** **Curva de respuesta :** **Curva di risposta :**	20 Hz - 20 kHz ± 0,5 dB
Number of channel : **Nombre de canaux :** **Zahl der Kanäle :** **Numero de canales :** **Numero di canali :**	2	**Signal to noise ratio :** **Rapport signal / bruit :** **Geräuschspannungsabstand :** **Relacion señal / ruido :** **Rapporto segnale / disturbo :**	92 dB
Total harmonic distorsion : **Distorsion harmonique :** **Klirrfaktor :** **Distorsion armonica :** **Distorsione armonica :**	0,007 % - 1 kHz 0dB	**Stereo separation :** **Diaphonie :** **Übersprechdämpfung :** **Diaphonia :** **Diaphonia :**	86dB - 1 kHz
Outpout voltage : **Niveau de sortie :** **Ausgangsspannung :** **Nivel de las salidas :** **Livello di uscita :**	2 V	**Sampling frequency :** **Fréquence d'échantillonnage :** **Abtastfrequenz :** **Frequencia de muestro :** **Frequenza di campionatura :**	44,1 kHz
Dynamic range : **Gamme dynamique :** **Dynamikumfang :** **Dinamica :** **Dinamica :**	96 dB - 1kHz	**Quantization number :** **Quantification :** **Quantisierung :** **Quantificacion :** **Quantizzazione :**	16 bit linear / channel

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BTX-BESTELLSERVICE * 458518 #

NORDMENDE

These instructions are for service dealers only · Subject to modification · Ces indications et instructions sont destinées exclusivement au service du commerce spécialisé Modifications réservées · Diese Angaben und Hinweise sind ausschließlich für den Service des Fachhändlers bestimmt · Änderungen vorbehalten · Estos datos e instrucciones son destinados exclusivamente al servicio técnico del revendedor · Salvo modificación · Questi dati e queste istruzioni sono riservati ai tecnici del servizio assistenza Con riserva di modifiche

Two main P.C.B. versions have successively equiped our sets . They are easily identifiable by their dimentions and their digital output socket:

-1st Version : 250 x 165 mm, socket inserted in a separated board.

-2nd Version : 195 x 165 mm, socket inserted in the main board.

For all informations about main board (1st Version) and mechanical dismantle / assembly, see the previous technical guide of CP 3000 / 3001.

As regards informations about control / display board (1st and 2nd version) and main board (2nd version) , see the glossary below.

Deux versions de platines principales ont successivement équipées nos appareils. Elles sont identifiables par leurs dimensions et leur prise sortie digitale.

- 1ère version 250 x 165 mm, prise cablée sur une platine séparée

- 2ème version 195 x 165 mm, prise cablée sur la platine principale

Pour les informations concernant la platine principale (1ère version) ainsi que le démontage / remontage de la mécanique voir la précédente documentation technique du CP 3000 / 3001

En ce qui concerne les platines d'affichage / commandes (1ère et 2ème version) ainsi que la platine principale (2ème version) voir sommaire ci-dessous.

Dos versiones de platinas principales equiparan successivamente nuestros aparatos. Pueden identificar-se por sus dimensiones y su toma salida digital.

- 1a versión 250 x 165 mm, toma montada en una platina separada.

- 2a versión 195 x 165 mm, toma montada en la platina principal.

Para toda información sobre la platina principal (1a versión) asi como el desmontaje / montaje de la mecánica ver la precedente documentación del CP 3000 / 3001.

En lo que se refiere a las platinas mandos / indicador (1a y 2a versión) asi como la platina principal (2a versión) ver el sumario abajo.

Unsere Geräte sind nacheinander mit zwei verschiedenen Ausführungen der Grundplatte geliefert worden. Sie unterscheiden sich durch ihre Abmessungen und die Digital-Ausgangsbuchse.

- 1. Ausführung 250 x 165 mm, Buchse an separate Platte gekabelt.

- 2. Ausführung 195 x 165 mm, Buchse an Grundplatte gekabelt.

Die Informationen bezüglich der Grundplatte (1. Ausführung) und des Aus- und Einbaus des Mechanismus finden Sie in der vorhergehenden technischen Dokumentation des CP 3000. Informationen über die Anzeige / Steuerplatte (1. und 2. Ausführung) sowie über die Grundplatte (2. Ausführung) sind in dem folgenden Inhaltsverzeichnis angegeben.

Sui nostri apparecchi sono state adottate successivamente due versioni di piastre principali. Possono essere riconosciute in base alle loro dimensioni ed alla presa di uscita digitale.

-1a versione 250 x 165 mm, presa cablata su piastra separata.

-2a versione 195 x 165 mm, presa cablata su piastra principale.

Per le informazioni riguardanti la piastra principale (1a versione) e lo smontaggio / montagio della parte meccanica, riportarsi alla 1a documentazione tecnica del CP 3000 / 3001.

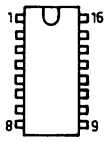
Per quanto riguarde le piastre di comando / indicatore (1a e 2a versione) e la piastra principale (2a versione) riportarsi all'indice in appresso.

GLOSSARY - SOMMAIRE - INHALTSVERZEICHNIS- SUMARIO - INDICE

Version 1 - 1. Ausführung	Pag.	Version 2 - 2 Ausführung	Pag.
MECHANIC DISMANTLE / ASSEMBLY AUS- / EINBAU-MECHANISMUS DEMONTAGE / REMONTAGE DE LA MECANIQUE DESMONTAJE / MONTAJE DE LA MECANICA SMONTAGGIO / MONTAGGIO DELL'INSIEME MECCANICHE	—	MECHANIC DISMANTLE / ASSEMBLY AUS- / EINBAU-MECHANISMUS DEMONTAGE / REMONTAGE DE LA MECANIQUE DESMONTAJE / MONTAJE DE LA MECANICA SMONTAGGIO / MONTAGGIO DELL'INSIEME MECCANICHE	—
KEY / DISPLAY BOARD PLATINE AFFICHAGE / COMMANDES LTPL. ANZEIGE / STEUERUNG PLATINA MANDOS / INDICADOR PIASTRA INDICATORE / COMANDI		KEY / DISPLAY BOARD PLATINE AFFICHAGE / COMMANDES LTPL. ANZEIGE / STEUERUNG PLATINA MANDOS / INDICADOR PIASTRA INDICATORE / COMANDI	
CP 3000 / 3001	3,4	CP 3001	3,4
CP 3500	7,8	CP 7000	5,6
		CP 3500	7,8
MAIN BOARD PLATINE PRINCIPALE GRUNDPLATTE PLATINA PRINCIPAL PIASTRA PRINCIPALE	—	MAIN BOARD PLATINE PRINCIPALE GRUNDPLATTE PLATINA PRINCIPAL PIASTRA PRINCIPALE	9-18

Present technical guide - présente documentation - vorliegende technische Dokumentation- presente libro técnico - documentazione tecnica attuale

Previous technical guide - précédente documentation technique - vorhergehenden technischen Dokumentation precedente libro técnico - documentazione tecnica precedente

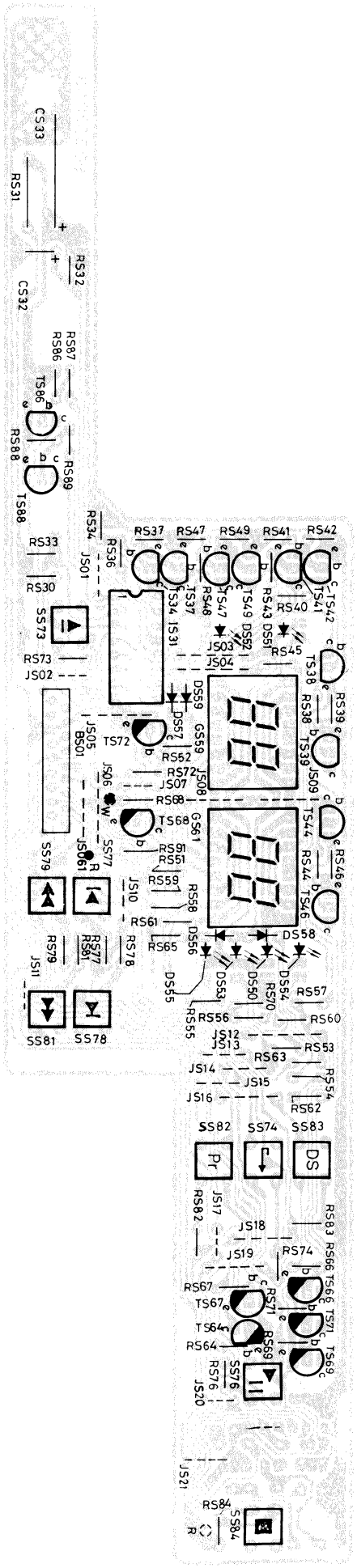


TC 4094 P

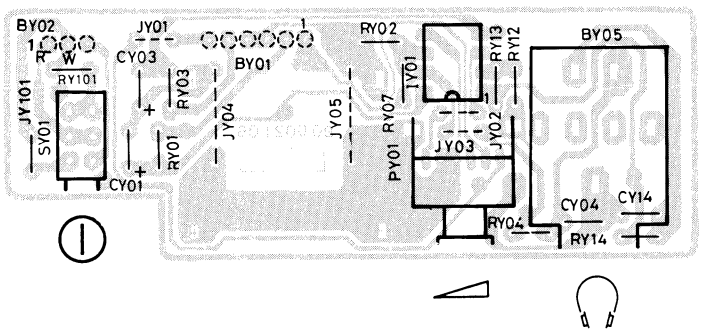
BC 328
BC 338
BC 558

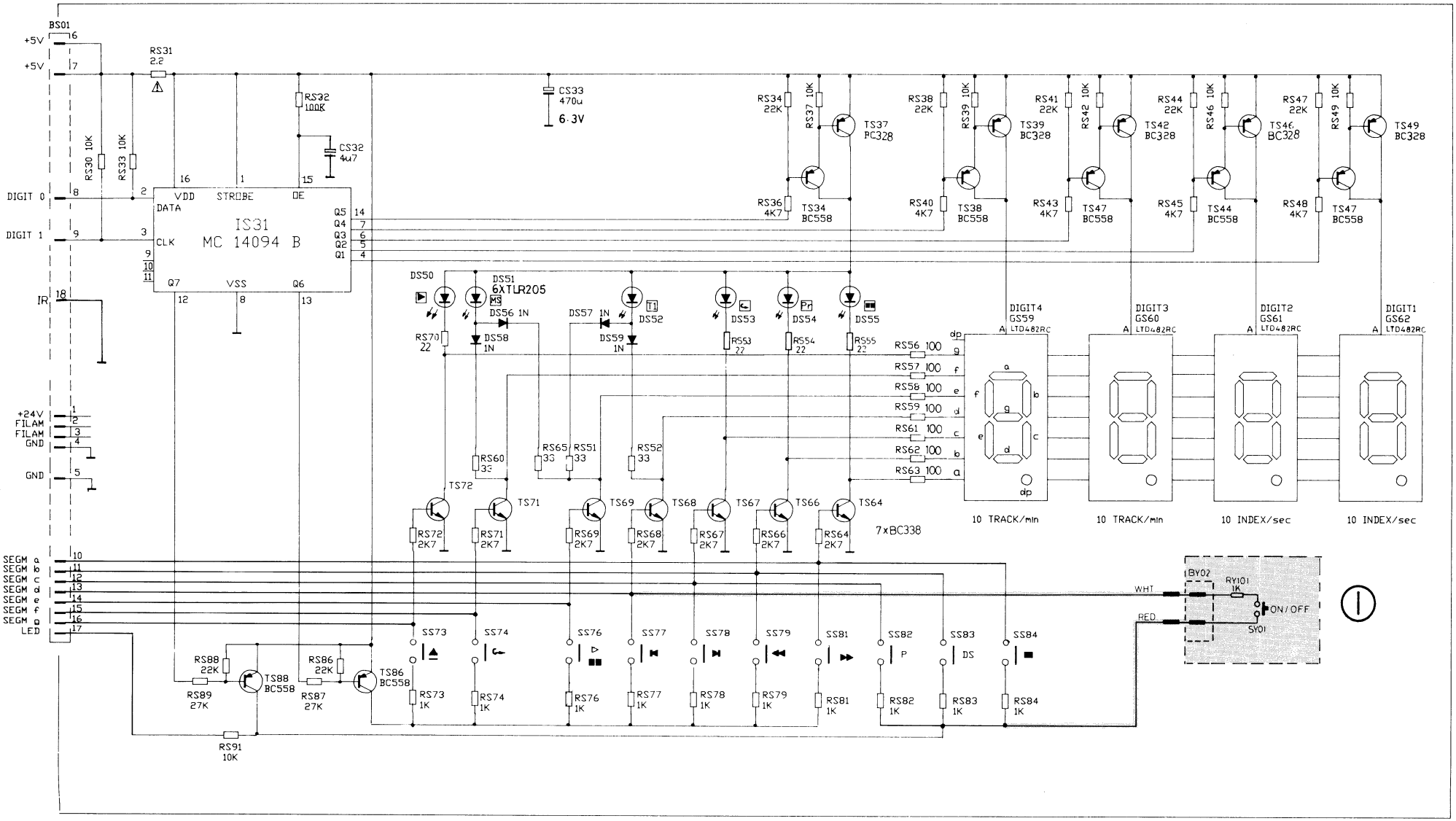
	REPEAT
	PLAY
	PAUSE
	FAST FORWARD
	FAST BACK
	STOP
	STEP FORWARD
	STEP BACK
DS	DISPLAY SELECT
Pr	PROGRAMMING

PCB Controls / display
Platine commandes / afficheur
Ltpl. Bedienteil / Anzeiger
Platina de mandos / indicador
Piastra comandi / indicator



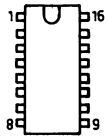
PCB headphone-jack / on-off switch
Platine prise casque / inter marche-arrêt
Ltpl. Kopfhörerbuchse / Ein-/Ausschalter
Platina toma auriculares / interruptor
Piastra presa per cuffia / interrutore



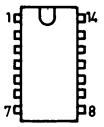

BS01
+5V
+5V
RS31 2.2
RS32 100K
CS33 470u 6.3V
CS32 4u7
RS30 10K
RS33 10K
DIGIT 0
DIGIT 1
IR
VDD
STROBE
DE
DATA
CLK
IS31 MC 14094 B
Q7
VSS
Q6
Q5
Q4
Q3
Q2
Q1
+24V
FILAM
FILAM
GND
GND
SEGM a
SEGM b
SEGM c
SEGM d
SEGM e
SEGM f
SEGM g
LED
RS34 22K
RS37 10K
TS37 PC328
RS36 4K7
TS34 BC558
RS38 22K
RS39 10K
TS39 BC328
RS40 4K7
TS38 BC558
RS41 22K
RS42 10K
TS42 BC328
RS43 4K7
TS47 BC558
RS44 22K
RS46 10K
TS46 BC328
RS45 4K7
TS44 BC558
RS47 22K
RS49 10K
TS49 BC328
RS48 4K7
TS47 BC558
DS50
DS51 6xTLR205
DS56 1N
DS58 1N
DS57 1N
DS59 1N
DS52
DS53
DS54
DS55
RS70 22
RS53 22
RS54 22
RS55 22
RS56 100
RS57 100
RS58 100
RS59 100
RS61 100
RS62 100
RS63 100
DIGIT4 GS59 LTD482RC
DIGIT3 GS60 LTD482RC
DIGIT2 GS61 LTD482RC
DIGIT1 GS62 LTD482RC
10 TRACK/min
10 TRACK/min
10 INDEX/sec
10 INDEX/sec
RS60 33
RS65 33
RS51 33
RS52 33
TS72
TS71
TS69
TS68
TS67
TS66
TS64
7xBC338
RS72 2K7
RS71 2K7
RS69 2K7
RS68 2K7
RS67 2K7
RS66 2K7
RS64 2K7
SS73
SS74
SS76
SS77
SS78
SS79
SS81
SS82
SS83
SS84
P
DS
RS88 22K
RS89 27K
TS88 BC558
RS86 22K
RS87 27K
TS86 BC558
RS73 1K
RS74 1K
RS76 1K
RS77 1K
RS78 1K
RS79 1K
RS81 1K
RS82 1K
RS83 1K
RS84 1K
RS91 10K
BY02
RY101 1K
ON/OFF
SY01
WHT
RED

VERSION 2

BC 328
BC 337
BC 547 C
BC 548 C, B
BC 557 C
BC 558 C



MC 14094

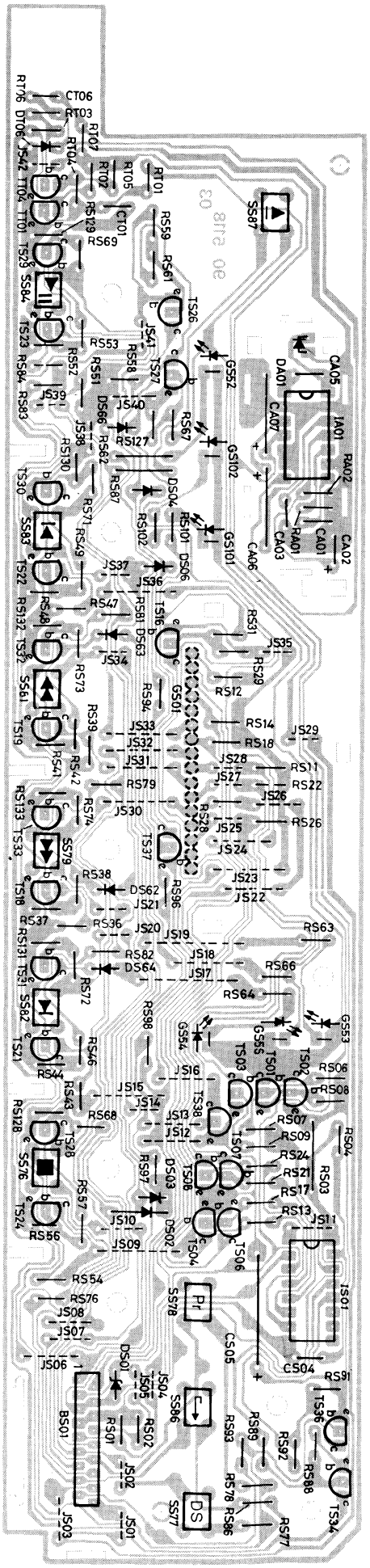


U 2505 B

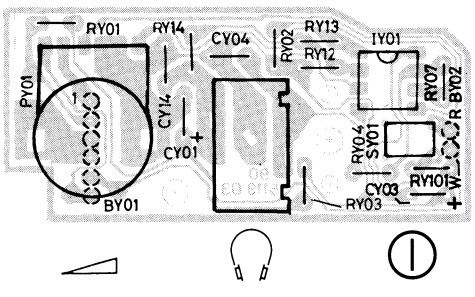
	REPEAT
	PLAY
	PAUSE
	FAST FORWARD
	FAST BACK
	STOP
	STEP FORWARD
	STEP BACK
DS	DISPLAY SELECT
Pr	PROGRAMMING

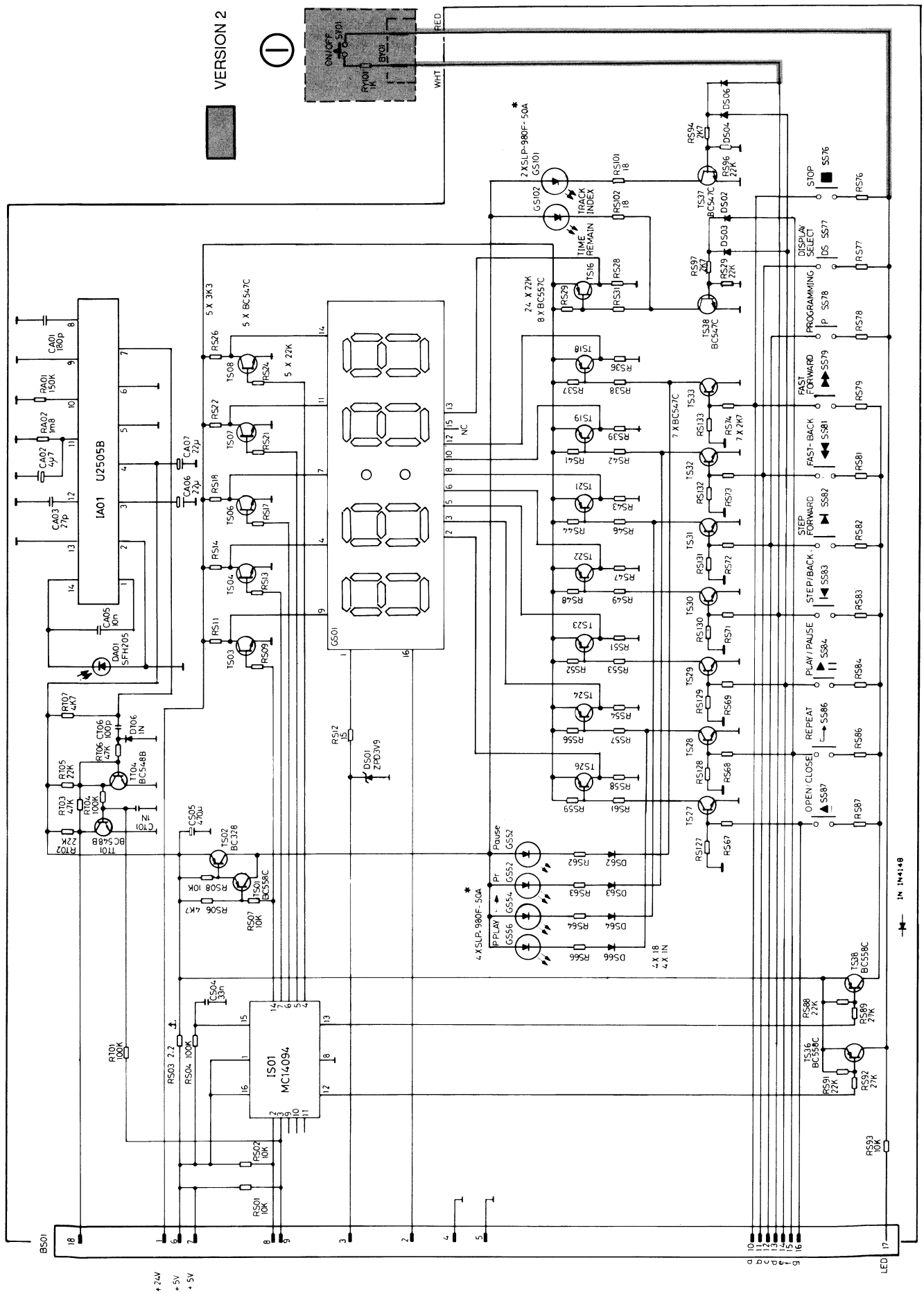
Component side
Côté composants
Bestückungsseite
Lado componentes
Lato componenti

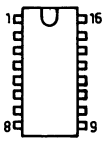
PCB Controls / display
Platine commandes / afficheur
Ltpl. Bedienteil / Anzeiger
Platina de mandos / indicador
Piastra comandi / indicator



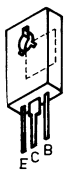
PCB headphone-jack
Platine prise casque
Ltpl. Kopfhörerbuchse
Platina toma auriculares
Piastra presa per cuffia




VERSION 2
ON/OFF
ST01
RY101 1K
BT01
RED
WHT
IA01 U2505B
DA01 SFH205
IS01 MC14094
GS01
DS01 ZPD3V9
TS01 BC558C
TS02 BC328
TS04 BC548B
TS06 BC547C
TS08 BC547C
TS07
TS04
TS03
TS18
TS19
TS21
TS22
TS23
TS24
TS26
TS16
TS37 BC547C
TS38 BC547C
TS32
TS31
TS30
TS29
TS28
TS27
TS33
TS36 BC558C
TS38 BC558C
2 XSLP-980F-50A
GS101
GS102
TRACK INDEX
TIME REMAIN
24 X 22K
8 X BC557C
7 X BC547C
5 X 3K3
5 X BC547C
5 X 22K
4 XSLP-980F-50A
Pause
Pr
PPLAY
GS52
GS54
GS56
4 X 18
4 X IN
DS04
DS06
DS02
DS03
STOP
DISPLAY SELECT
PROGRAMMING
FAST FORWARD
FAST-BACK
STEP FORWARD
STEP/BACK
PLAY/PAUSE
REPEAT
OPEN/CLOSE
BS01
LED
+24V
+5V
+5V
IN 1N4148



MC 14094



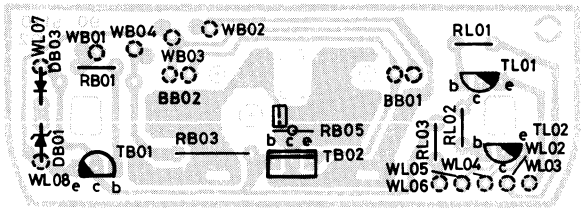
BD 135

BC 337
BC 548
BC 558

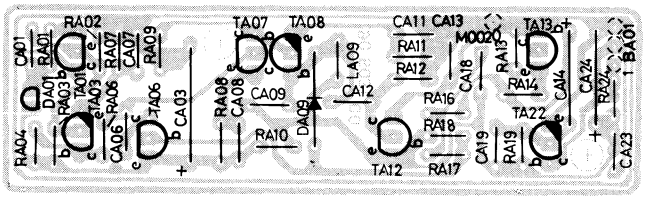
2 SC 1815

	REPEAT
	PLAY
	PAUSE
	FAST FORWARD
	FAST BACK
	STOP
	STEP FORWARD
	STEP BACK
DS	DISPLAY SELECT
Pr	PROGRAMMING

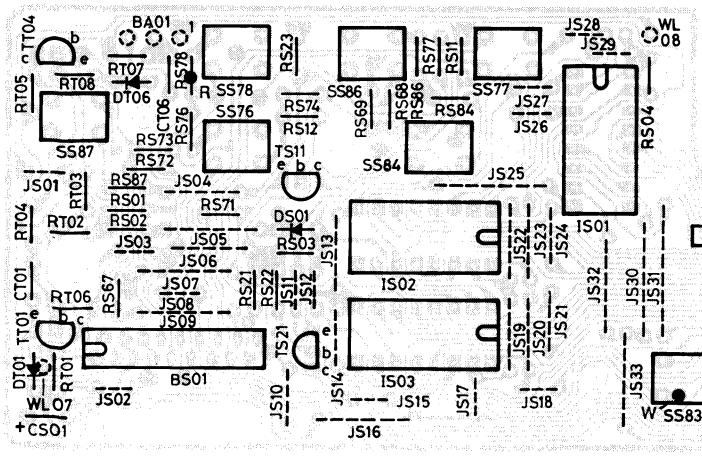
PCB lamps
Platine lampes
Ltpl. Lampe
Platina lamparas
Piastra lampade



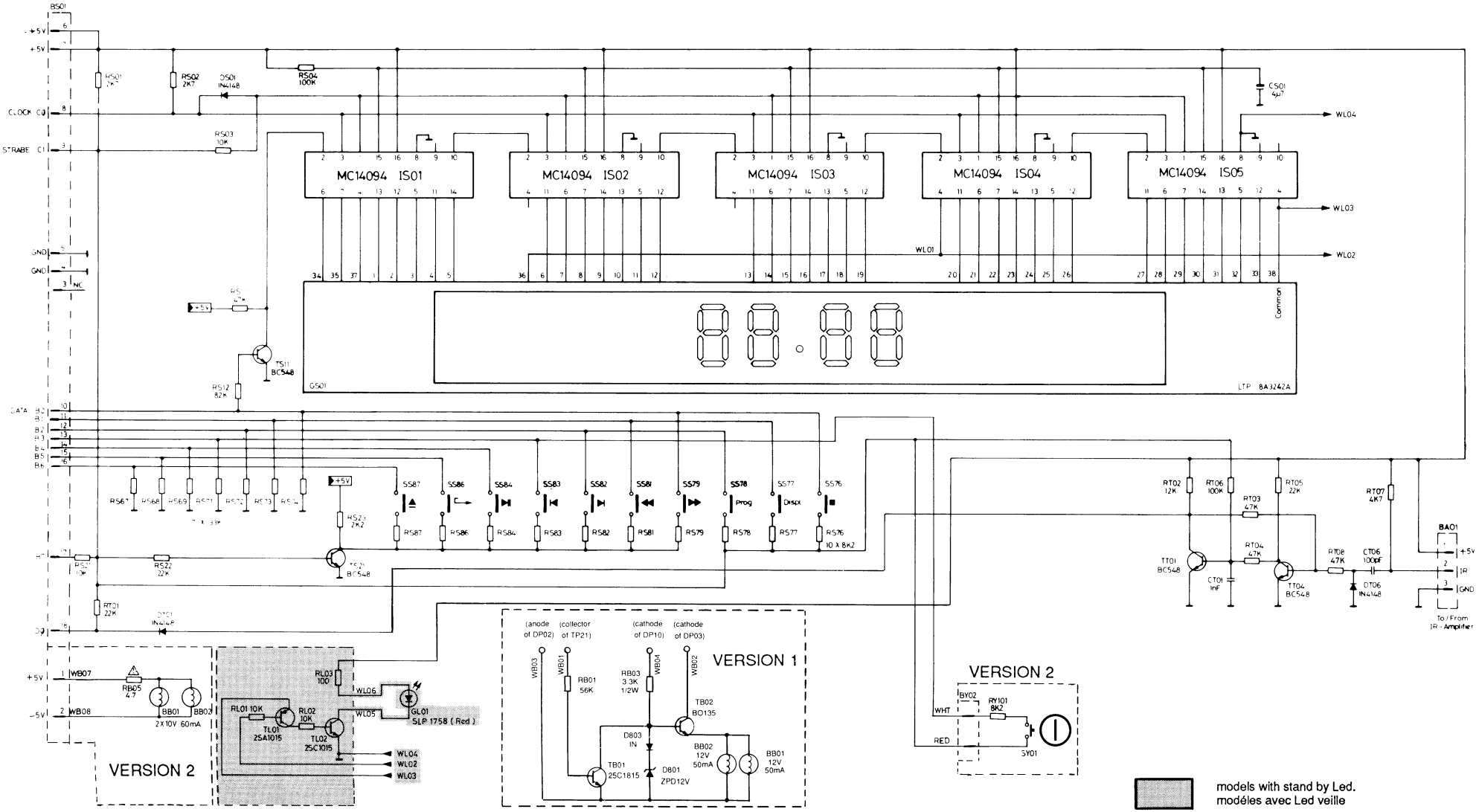
PCB IR receiver
Platine récepteur IR
Ltpl. IR Empfänger
Platina receptor IR
Piastra ricevitor IR



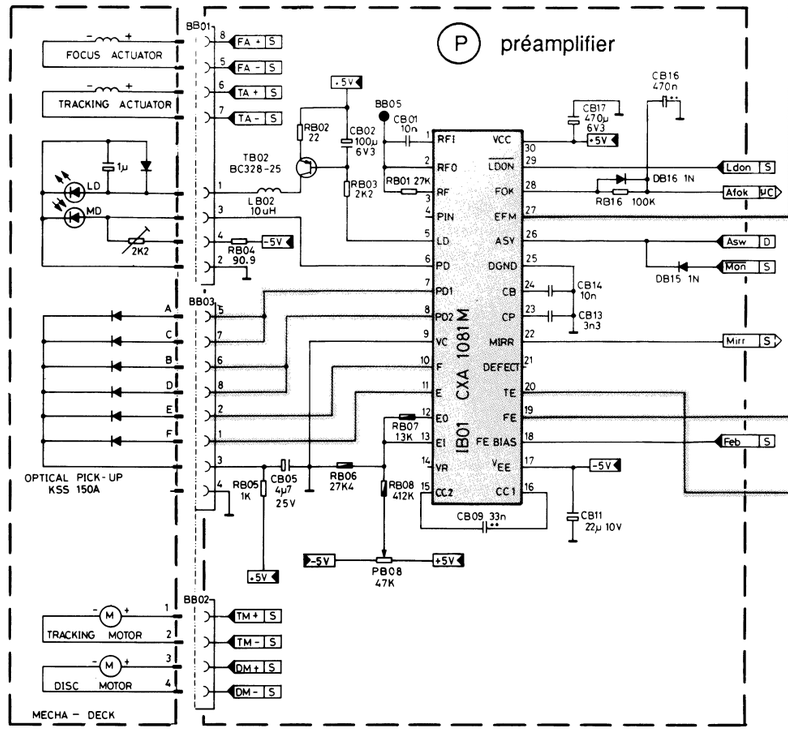
Component side
Côté composants
Bestückungsseite
Lado componentes
Lato componenti

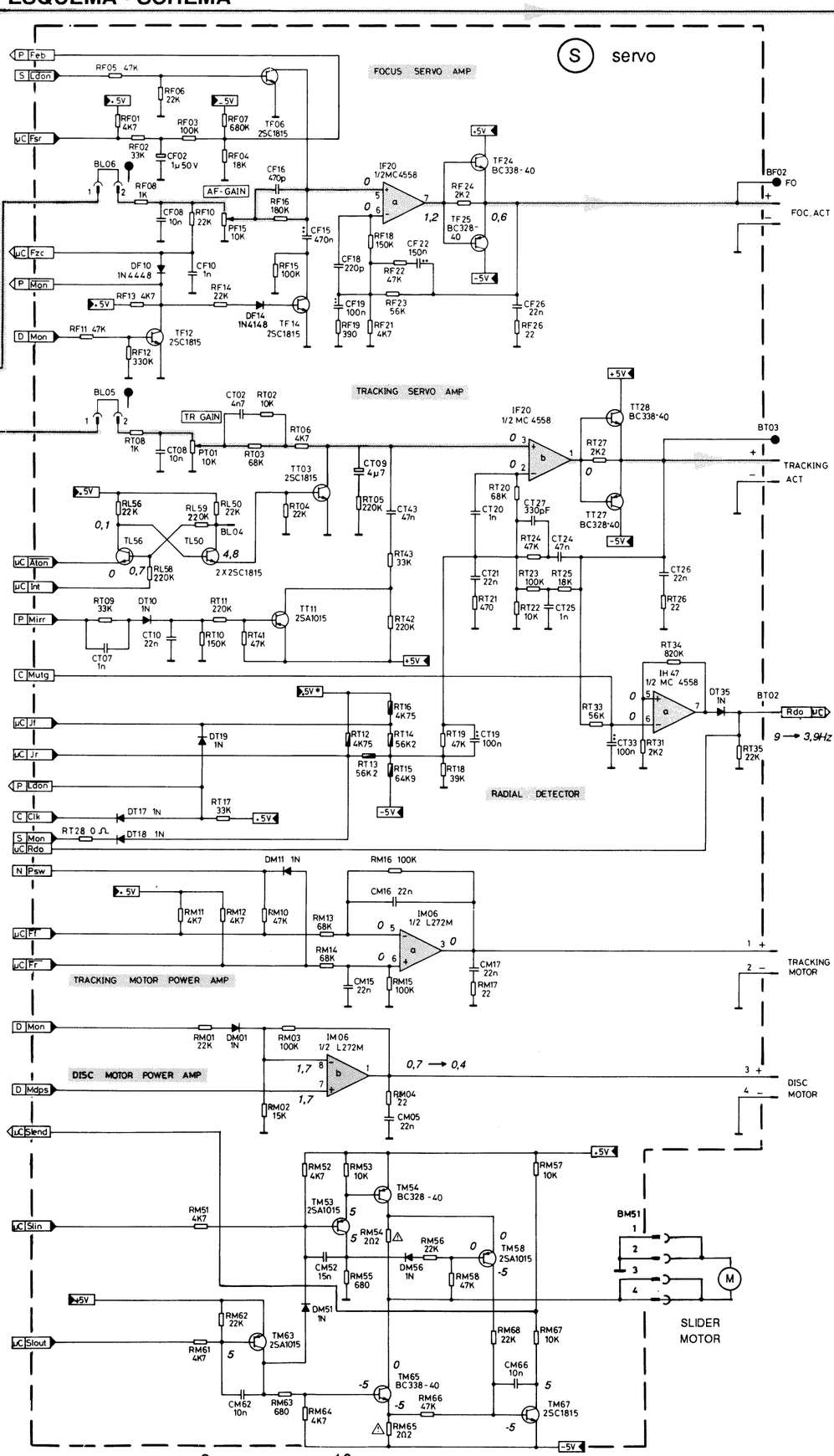


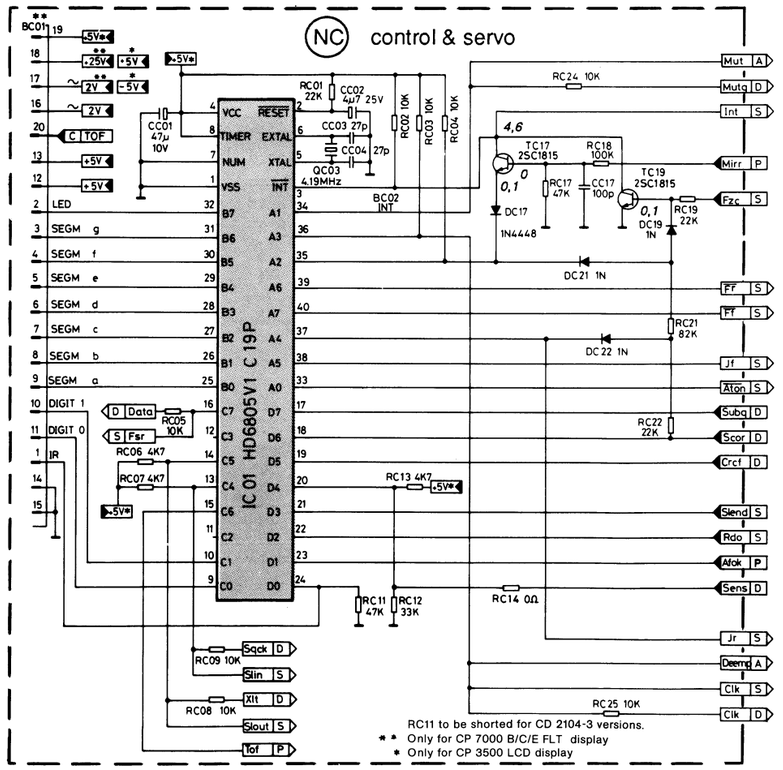
PCB Controls / display
Platine commandes / afficheur
Ltpl. Bedienteil / Anzeiger
Platina de mandos / indicador
Piastra comandi / indicator

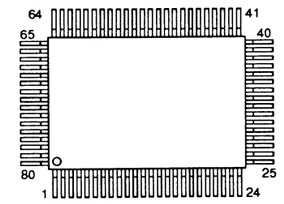

MC14094 IS01
MC14094 IS02
MC14094 IS03
MC14094 IS04
MC14094 IS05
VERSION 1
VERSION 2
VERSION 2
Prog
Dscx
Common
LTP BA3242A
models with stand by Led.
modéles avec Led veille

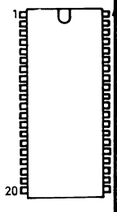
SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - ESQUEMA - SCHEMA

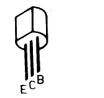


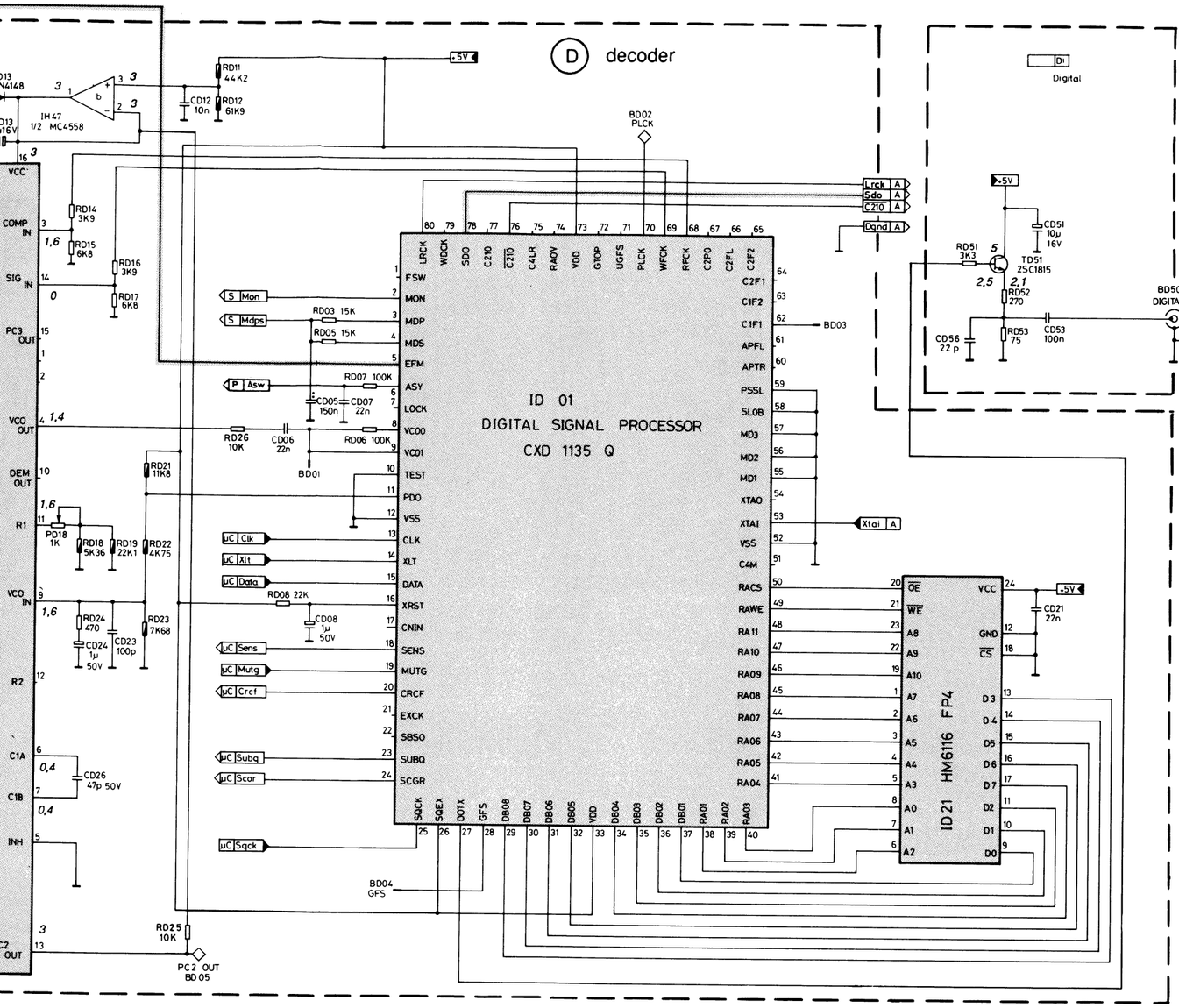


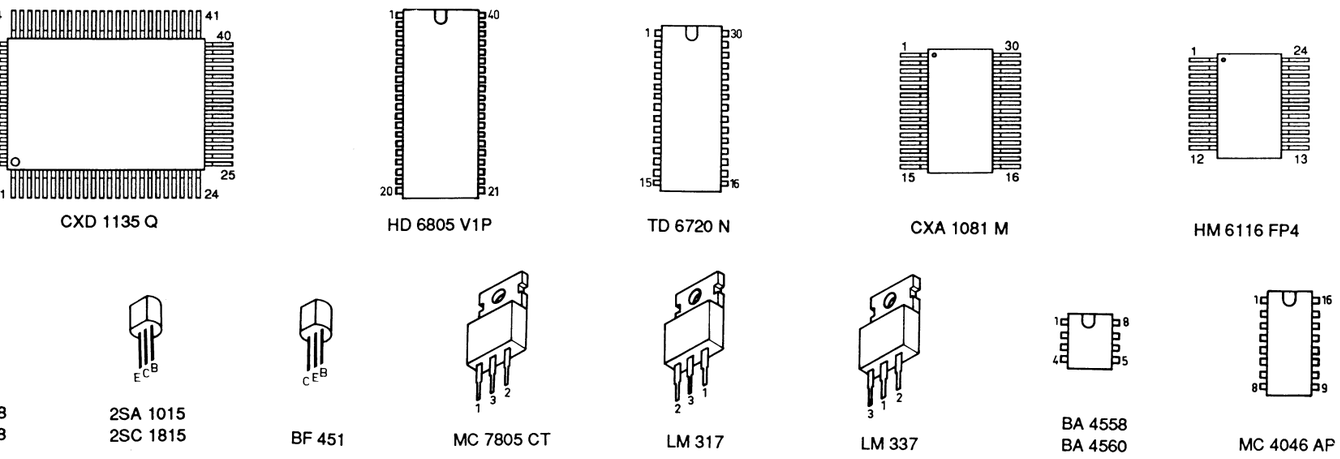


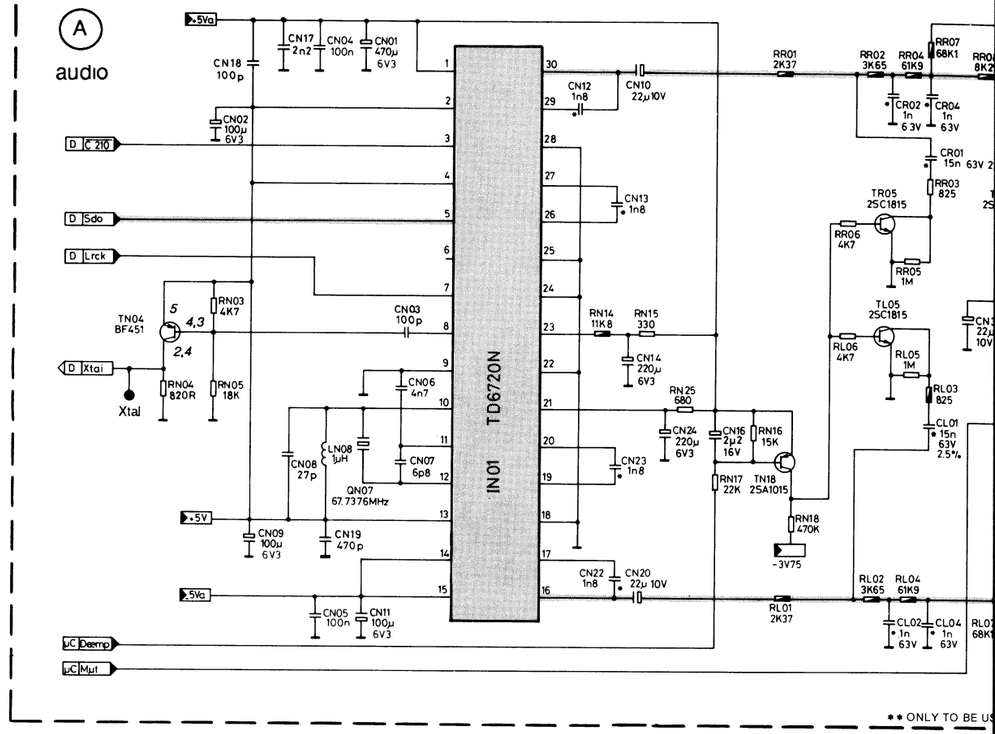


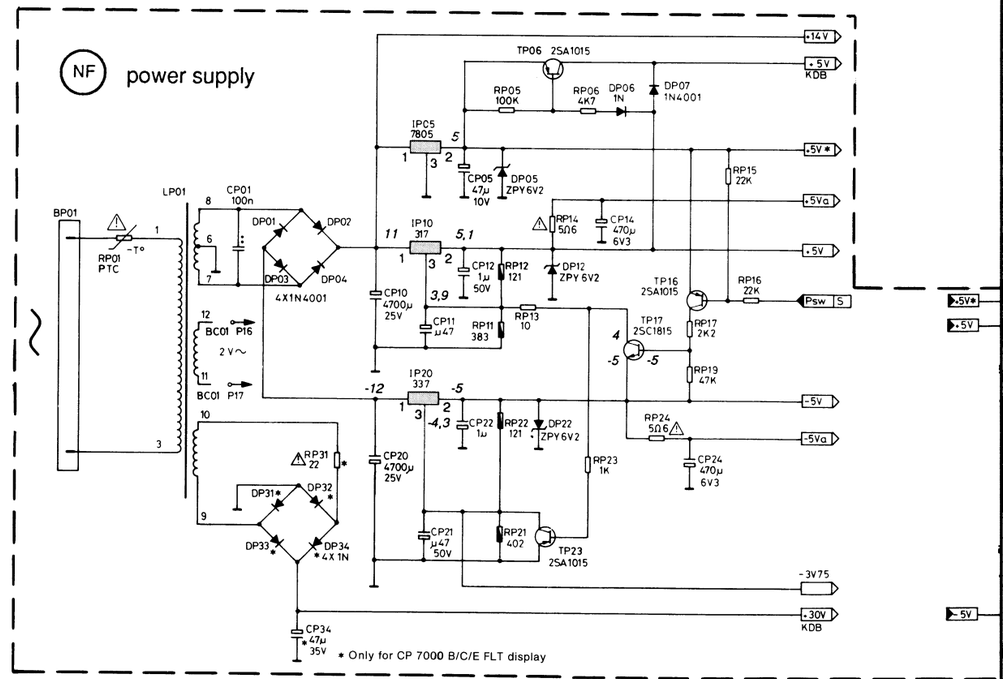





D decoder
ID 01
DIGITAL SIGNAL PROCESSOR
CXD 1135 Q
ID21 HM6116 FP4
TD6720N
IH47 1/2 MC4558
BD02 PLCK
BD03
BD04 GFS
BD05 PC2 OUT
BD01
Lrck A
Sdo A
C210 A
Dgnd A
Xtai A
S Mon
S Mdps
P Asw
µC Clk
µC Xlt
µC Data
µC Sens
µC Mutg
µC Crcf
µC Subq
µC Scor
µC Sqck
DI Digital
BD50 DIGITAL O/P
DIGITAL
CD54 22n
To Gnd of BRD 2


CXD 1135 Q
HD 6805 V1P
TD 6720 N
CXA 1081 M
HM 6116 FP4
2SA 1015
2SC 1815
BF 451
MC 7805 CT
LM 317
LM 337
BA 4558
BA 4560
MC 4046 AP


A audio
TD6720N
** ONLY TO BE US

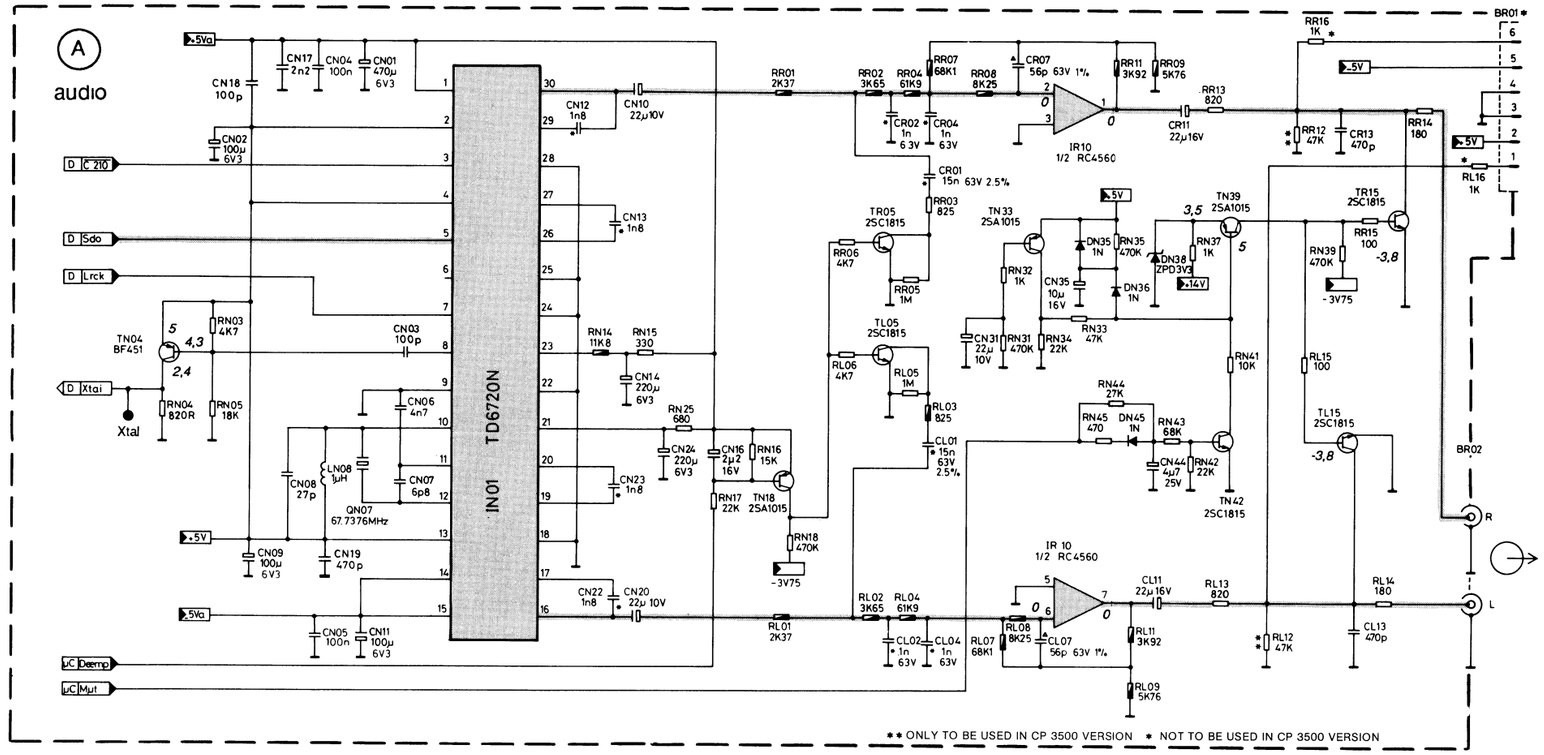

NF power supply
* Only for CP 7000 B/C/E FLT display

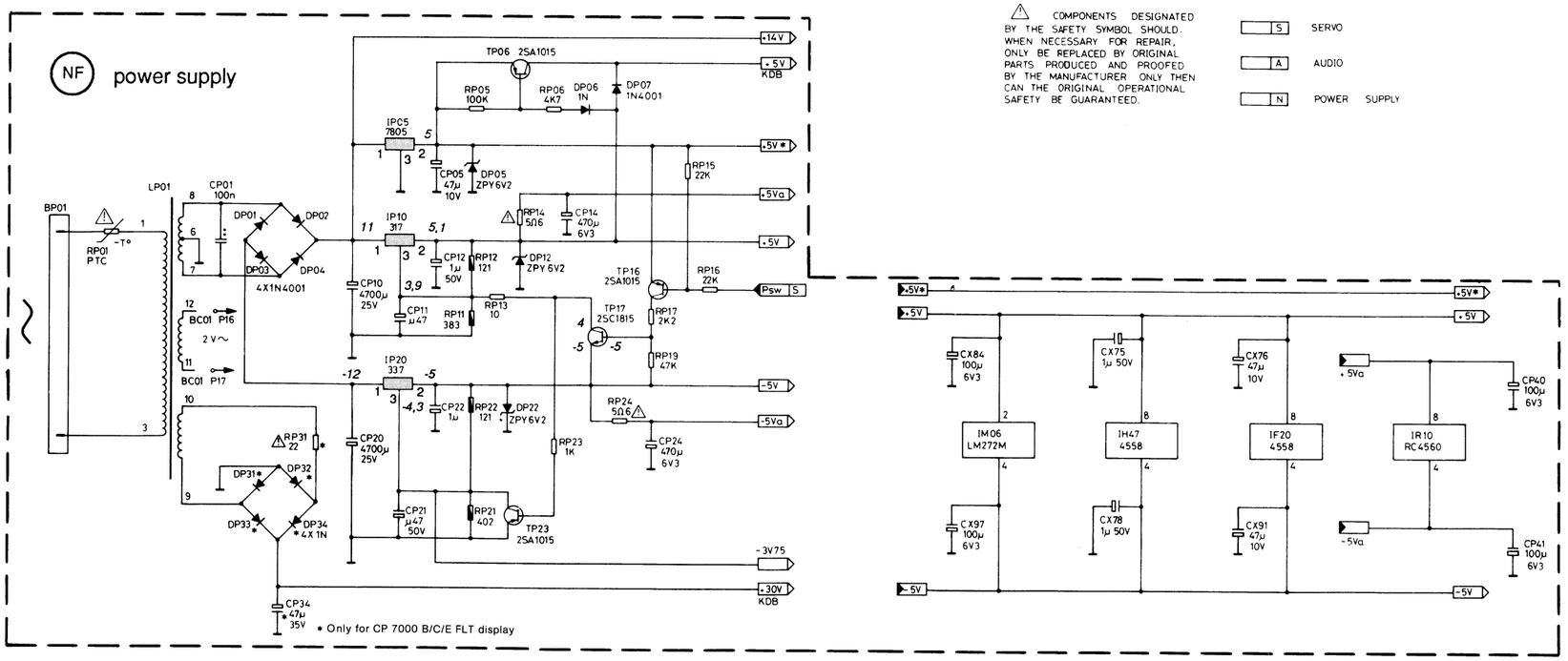
BD50
DIGITAL O/P

DIGITAL

CD54
22n

To Gnd of BRD 2





TO POWER SUPPLY

FROM POWER SUPPLY

1N 1N4148

⚠ COMPONENTS DESIGNATED BY THE SAFETY SYMBOL SHOULD. WHEN NECESSARY FOR REPAIR, ONLY BE REPLACED BY ORIGINAL PARTS PRODUCED AND PROOFED BY THE MANUFACTURER ONLY THEN CAN THE ORIGINAL OPERATIONAL SAFETY BE GUARANTEED.

µC SERVO -uC

D DECODER

P PRE AMPLIFIER

S SERVO

A AUDIO

N POWER SUPPLY

AFOK When focus is OK on first search
Focalisation correcte lors de la premiére recherche

ASW Slice level
Niveau de décision

C210 Bit clock output 4,2336 MHz / 2,1168 MHz

DEEMP Deemphasis
Désaccentuation

DOTX Digital output
Sortie digitale

DM Disc motor control
Commande du moteur disque

EFM HF signal to decoder
Signal HF modulé EFM

FA Focus coil control
Signal de commande de la boboine Focus

FE Focus error signal
Signal d'érreur de focalisation

FEB Focus servo bias
Polarisation des circuits de focus

FF Fast forward tracking control
Commande d'avance rapide du chariot laser

FR Fast rewind tracking control
Commande de retour rapide du chariot laser

FSR Focus search
Recherche de focalisation

J F Track. servo front jump
Commande de tracking en avance

J R Track. servo rear jump
Commande de tracking en retour

LDON Laser diode on
Allumage de la diode laser

LRCK L/R switch clock
Horloge de commutation voies D/G

MIRR Mirror detection
Détection de mirroir

MON Disc motor on
Démarrage moteur disque

MUT AF.Muting
Silencieux BF.

MUTG Muting
Silencieux

RDO Radial detector signal
Signal detectant un déplacement de piste

SCOR Subcode sync. S0 + S1
Sync. subcode S0 + S1

SLEND End of slider stroke signal
Signal de fin de course du tiroir

SLIN Slider closing control
Commande de fermeture du tiroir

SLOUT Slider opening control
Commande d'ouverture du tiroir

SQCK Subcode Q clock
Horloge subcode Q

SUBQ Subcode Q
Subcode Q

TA Tracking actuator control
Commande de la bobine tracking

TE Tracking error signal
signal d'erreur de tracking

TM Tracking motor control
Commande du moteur chariot

ADJUSTMENTS - REGLAGES - ABGLEICH - AJUSTES - REGOLAZIONE

BIT PLL FREERUN - BATTEMENT LIBRE DU PLL

PD 18 — BD02 — Hz

F = 4.321 MHz +/- 0,006

En cas d'impossibilité de réglage couper RD 19

TRACKING SERVO OFFSET-VALEUR MOYENNE DE TRACKING

-Play the 1st number recorded
-Lire le premier morceau du disque

BL05

PB 08 — 1 BL05

a = b

a
0
b

FOCUS GAIN

-Play the 1st number recorded
-Lire le premier morceau du disque

PF 15 — TF 24/25 emetteur — mV

V = 200 mV +/- 10

TRACKING GAIN

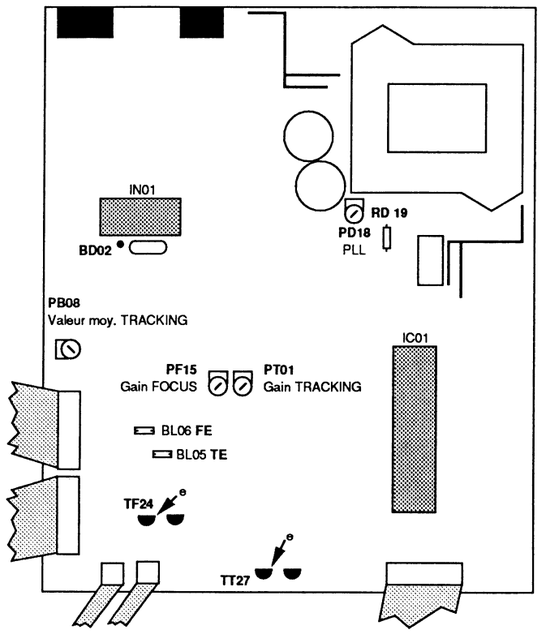
-Play the 1st number recorded
-Lire le premier morceau du disque

PT 01 — TT 27/28 emetteur — mV

V =130mV +/- 10

Lecture Play | Stop | Pause | Regler | 10 MΩ AC Millivoltmeter | Oscilloscop | Frequencemeter | Test point

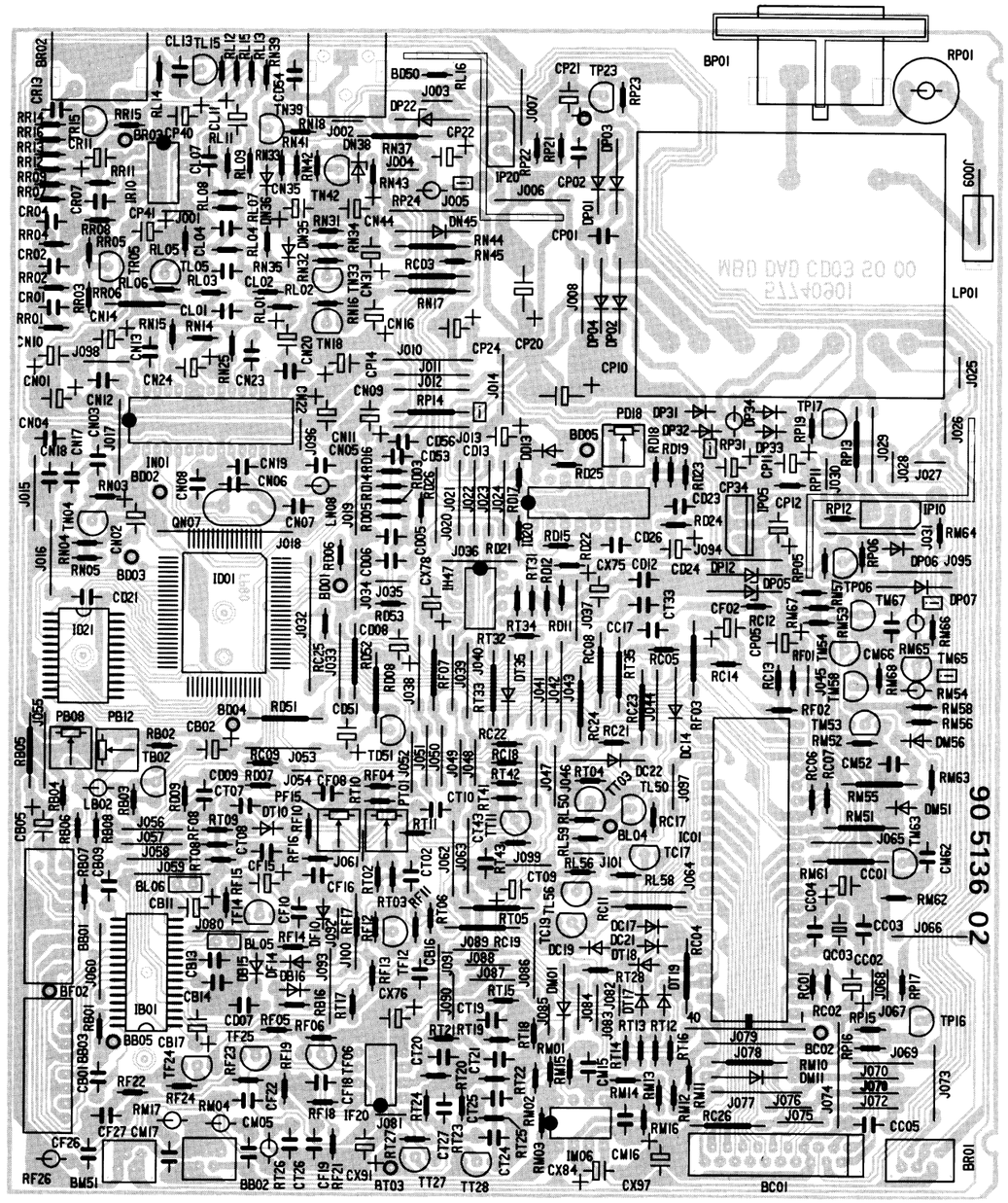
ADJUSTMENTS LOCATION - EMPLACEMENT DES REGLAGES - EINSTELLUNGEN - LOCALIZACION DE LOS AJUSTES - UBICAZIONE DEI DISPOSITIVI DI REGOLAZIONE



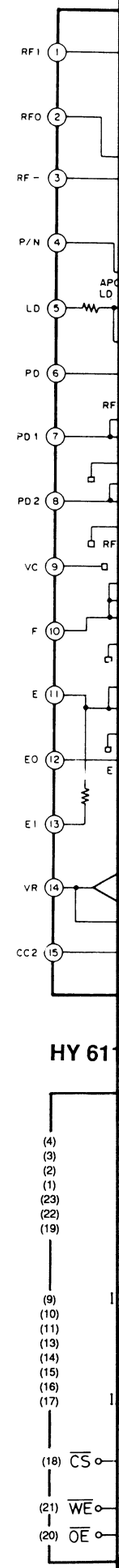
Main PCB
Platine principale
Grundplatte
Platina principal
Piastra principale

Component side
Côté composants
Bestückungsseite
Lado componentes
Lato componenti

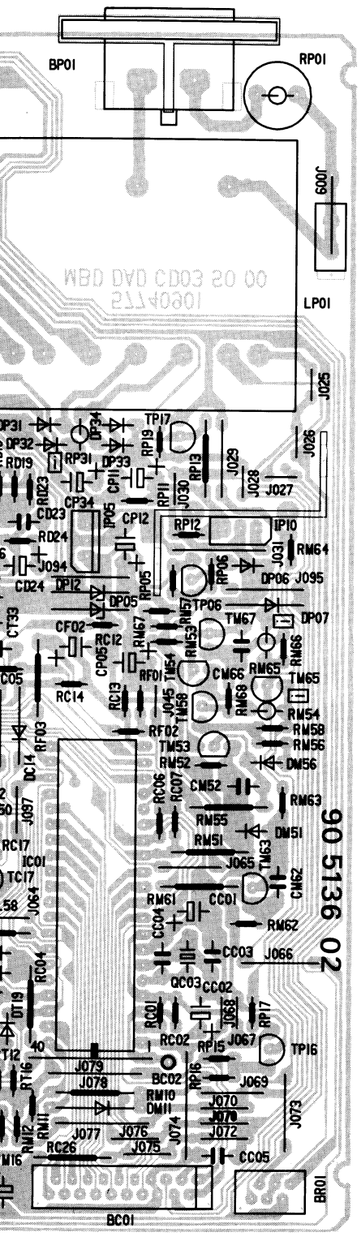
L/R — DIGITAL



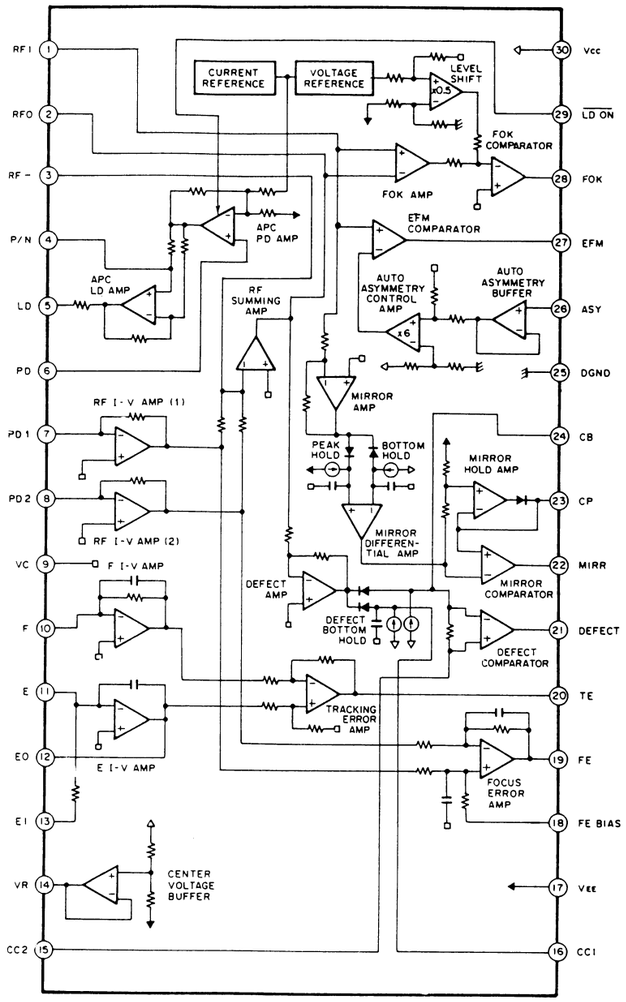
CXA 1



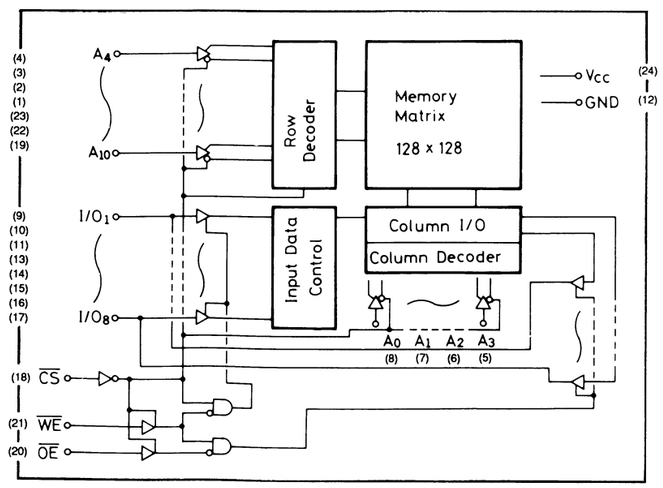
Component side
Côté composants
Bestückungsseite
Lado componentes
Lato componenti



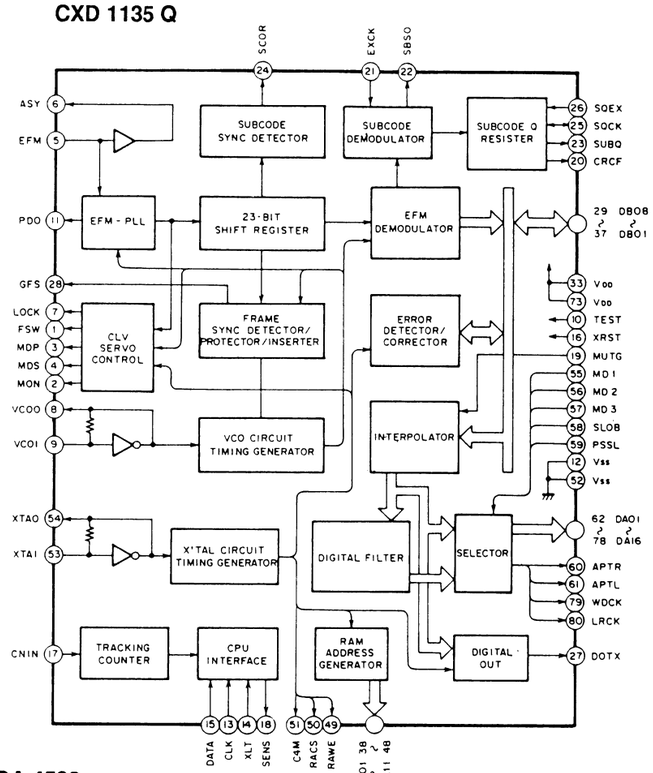
CXA 1081 M



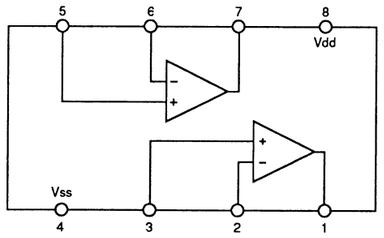
HY 6116 P



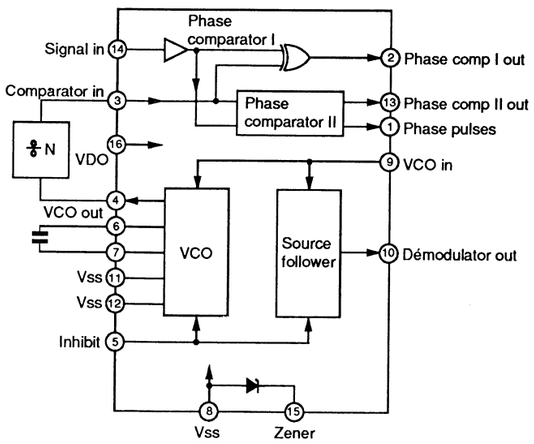
CXD 1135 Q

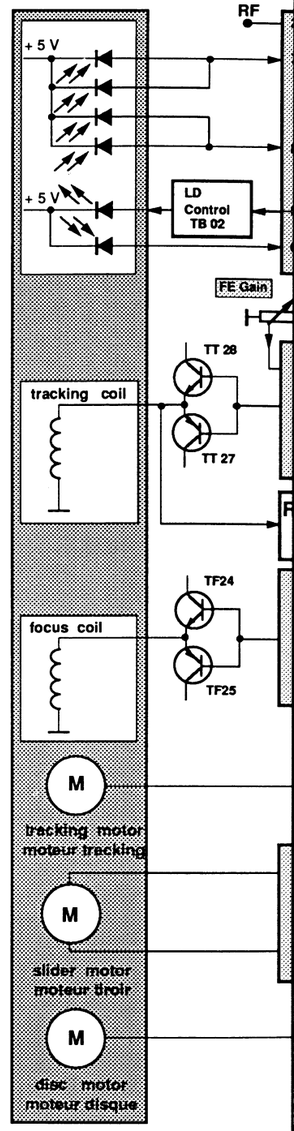


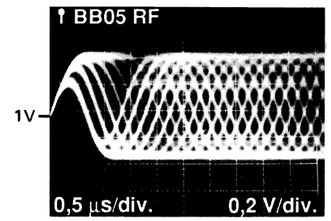
BA 4558 -BA 4560



CD 4046 A







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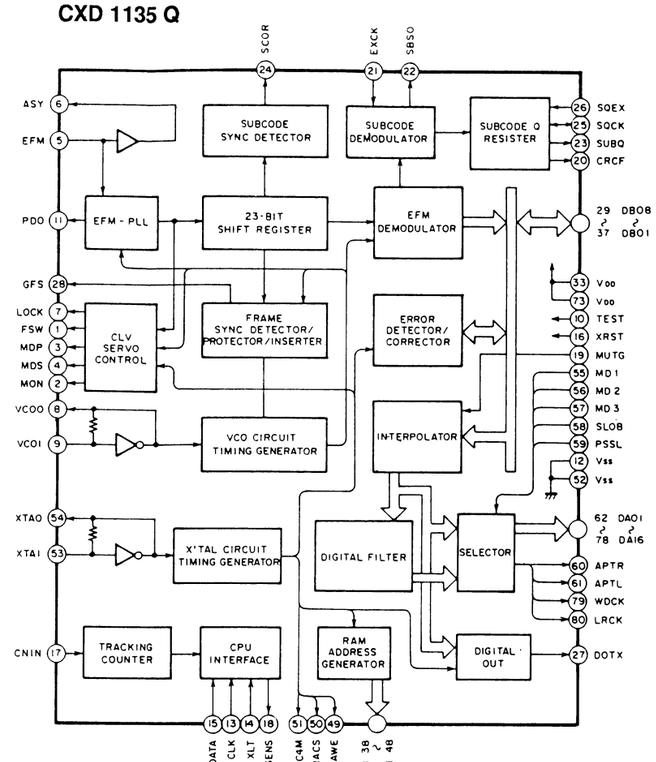

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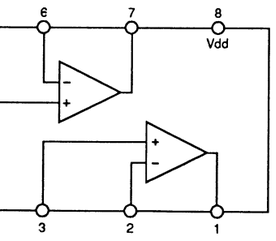
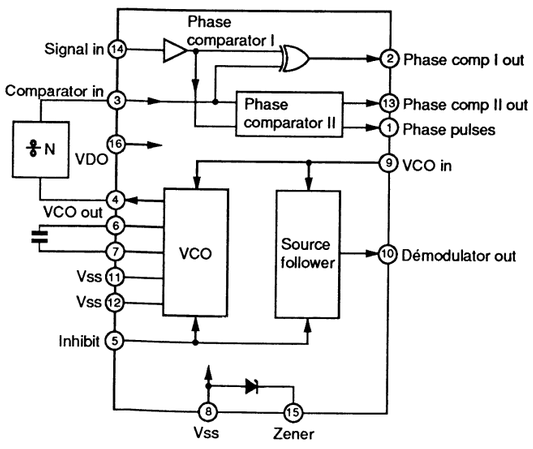


CD 4046 A



BLOCK DIAGRAM - SCHEMA SYNOPTIQUE - BLOCKSCHALTBILD - ESQUEMA DE BLOQUES - SCHEMA A BOCCI